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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/506,426	02/02/2005	Robert Alexander Ventzki	085449-0149	1230
22428 7590 05/13/2009 FOLEY AND LARDNER LLP SUITE 500 3000 K STREET NW WASHINGTON, DC 20007				
EXAMINER				
HANDY, DWAYNE K				
ART UNIT		PAPER NUMBER		
1797				
MAIL DATE		DELIVERY MODE		
05/13/2009		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/506,426

Applicant(s)

VENTZKI ET AL.

Examiner

DWAYNE K. HANDY

Art Unit

1797

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 April 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 70-79.81-84.87-91 and 93 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 70-79.81-84.87-91 and 93 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/06)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 70-72, 74-79, 81-84, 87-91 and 93 are rejected under 35 U.S.C. 102(b) as being anticipated by Hayashizaki et al. (6,120,667). This rejection was applied in the previous Office Action (mailed 10/01/08). It remains in effect. Please see Response to Arguments below.
3. Claims 70-72, 74-79, 81-84, 87 and 89-91 are rejected under 35 U.S.C. 102(e) as being anticipated by Wierzbowski et al. (US 2002/0168643). This rejection was applied in the previous Office Action (mailed 10/01/08). It remains in effect. Please see Response to Arguments below.
4. Claims 70-76, 78, 82-84, 87-91 and 93 are rejected under 35 U.S.C. 102(e) as being anticipated by Desrosiers et al. (6,410,332). This rejection was applied in the

previous Office Action (mailed 10/01/08). It remains in effect. Please see Response to Arguments below.

Response to Arguments

5. Applicant's arguments filed 01/02/09 have been fully considered but they are not persuasive.

Desrosiers

6. Applicant has argued that Desrosiers does not teach a device capable of generating and maintaining a predetermined temperature distribution in the direction perpendicular to sample migration. The Examiner respectfully disagrees. Desrosiers teaches a device where the sample migration occurs in the z-direction. Therefore, Desrosiers must be capable of providing a temperature distribution across the first space in the 'x' or 'y' direction(s). Desrosiers teaches temperature control through use of thermistors and resistance heaters but does not specify the specific location of these elements. Desrosiers also teaches heating and temperature control that may be provided by surrounding the apparatus with a blanket or bath (column 8, line 45; column 9, line 24; column 10, line 15; column 11, line 16). The Examiner submits that use of a blanket or bath that provides heat to the sides of the device would provide a temperature distribution in the x and y direction in all of separation elements (traps - 254) contained in the device.

7. Applicant has also argued that Desrosiers does not teach a joint space wherein separation medium fills the joint space entirely. This argument is beyond the scope of the claim as written. The claim as written does not require that the *joint space be filled* with separation medium or *be entirely filled* as being argued by applicant - the claim instead requires that the **first space contains a separation medium which fills the first space**. The Examiner considers the "joint space" to be different from the "first space" - the "joint space" would include the first space as well as other areas that combine with the first space to form a "joint space". In the case of Desrosiers, the Examiner submits that the sorbent traps (254) provide a "first space" that is filled with separation media. Applicant has also argued that the joint space is not compartmentalized by reaction vessels as in Desrosiers. This argument is beyond the scope of the claim. The claim does not contain language that prevents the "joint space" from being in a reaction block having multiple spaces such as wells or traps.

Hayashizaki

8. Applicant has argued that Hayashizaki does not teach a simultaneous separation and detection within a joint space nor a separation medium that fills the joint space entirely. The Examiner respectfully disagrees. As noted above, the claim as written does not require that the *joint space be filled* with separation medium or *be entirely filled* as being argued by applicant - the claim instead requires that the **first space contains a separation medium which fills the first space**. The Examiner considers the "joint space" to be different than the "first space" - the "joint space" would include the

first space as well as other areas that combine with the first space to form a "joint space". The separation capillaries of Hayashizaki's device are shown in Figures 1, 2, 4A, 4B and 10. During use, the capillaries are placed into wells that contain a sample. Upon application of a voltage, the sample moves upward into the capillary where the sample undergoes separation. The Examiner considers the capillaries to be a "first space" that is filled with separation media. The "joint space" is comprised of the sample well space and the separation capillaries. Applicant has also argued that the joint space is not compartmentalized by capillaries. This argument is beyond the scope of the claim. The claim does not contain language that prevents the "joint space" from being a sample well connected to a capillary.

Wierzbowski

9. Applicant has argued that Wierzbowski does not teach separation in a third coordinate direction. The Examiner respectfully disagrees. Wierzbowski's device is generally shown in Figures 1-2 while use of the device is described in Paragraphs 0011 and 0023-0025. In use, samples are loaded through the top wells (92) and onto the top of the separation media contained in the sample wells (40) of the sample block (20). The top layer of the separation media is a two dimensional space (x-y). When a potential is applied, the sample migrates through the separation media in a third direction (z) that is perpendicular to the original containment surface.

10. Applicant has also argued that Wierzbowski does not teach a joint space wherein separation medium fills the joint space entirely. This argument is beyond the scope of the claim as written. The claim as written does not require that the *joint space be filled* with separation medium or *be entirely filled* as being argued by applicant - the claim requires that the **first space contains a separation medium which fills the first space**. The Examiner considers the "joint space" to be different than the "first space" - the "joint space" would include the first space as well as other areas that combine with the first space to form a "joint space". In the case of Wierzbowski, the Examiner submits that the sample wells (40) provide a "first space" that is filled with separation media.

Conclusion

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DWAYNE K. HANDY whose telephone number is (571)272-1259. The examiner can normally be reached on M-F 11:00-7:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on (571)-272-1267. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Dwayne K Handy/
Examiner, Art Unit 1797

/Jill Warden/
Supervisory Patent Examiner, Art Unit 1797

May 9, 2009

